

IFW\$

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:  
Mok, et al.

Serial No.: 10/823,849

Confirmation No.: 5507

Filed: April 13, 2004

For: TWO POSITION ANNEAL  
CHAMBER

§  
§  
§  
§  
§  
§  
§  
§  
§  
§  
§

Group Art Unit: 2812

Examiner: Unknown

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Dear Sir:

CERTIFICATE OF MAILING 37 CFR 1.8	
I hereby certify that this correspondence is being deposited on <u>7/30</u> , 2004 with the United States Postal Service as First Class Mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450 Alexandria, VA 22313-1450.	
<u>7/30/04</u> Date	<u>[Signature]</u> Signature

**SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT**

The Applicants, and the Attorney who signs below on the basis of the information supplied by the inventor and the information in his file, submit herewith patents, publications, or other information of which they are aware, which may be material to the examination of this application and in respect of which there may be a duty to disclose in accordance with 37 CFR § 1.56.

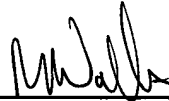
While the information submitted in this Supplemental Information Disclosure Statement may be material pursuant to 37 CFR § 1.56, it is not intended to constitute an admission that any patent, publication, or other information referred to therein is prior art for this invention unless specifically designated as such.

In accordance with 37 CFR § 1.97, this Supplemental Information Disclosure Statement is not to be construed as a representation that a search has been made or that no other possibly material information as defined under 37 CFR § 1.56(a) exists.

The patents and/or publications submitted herewith are set forth on the attached Form PTO-1449.

The Commissioner is hereby authorized to charge the sum of \$180.00 due under 37 CFR § 1.17(p) pursuant to § 1.97, and any other fee necessary to make this submission timely, to the Deposit Account No. 20-0782/AMAT/8298/NAN.

Respectfully submitted,



---

N. Alexander Nolte  
Registration No. 45,689  
MOSER, PATTERSON & SHERIDAN, L.L.P.  
3040 Post Oak Blvd. Suite 1500  
Houston, TX 77056  
Telephone: (713) 623-4844  
Facsimile: (713) 623-4846  
Attorney for Applicant(s)

291532\_1

Please type a plus sign (+) inside this box →



PTO/SB/08a (08-03)

Approved for use through 07/31/2006. OMB 0651-0031

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

Substitute for form 1449A/PTO

# INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

Sheet 1

of 2

Application Number	10/823,849
Filing Date	APRIL 13, 2004
First Named Inventor	YEUK-FAI MOK, ET AL.
Group Art Unit	2812
Examiner Name	UNKNOWN
Attorney Docket Number	AMAT/8298/CMP/ECP/RKK
Submission Date	7/30/04

## U.S. PATENT DOCUMENTS

Examiner Initials*	Cite No. <sup>1</sup>	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code <sup>2</sup> (if known)			
	A1	US-4,110,176	08-29-1978	Creutz, et al.	
	A2	US-4,326,940	04-27-1982	Eckles, et al.	
	A3	US-4,519,846	05-28-1985	Aigo	
	A4	US-4,568,431	02-04-1986	Polan	
	A5	US-4,693,805	09-15-1987	Fazle	
	A6	US-4,732,785	03-22-1988	Brewer	
	A7	US-4,789,445	12-06-1988	Goffman, et al.	
	A8	US-5,162,260	11-10-1992	Leibovitz, et al.	
	A9	US-5,222,310	06-29-1993	Thompson, et al.	

## FOREIGN PATENT DOCUMENTS

Examiner Initials*	Cite No. <sup>1</sup>	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T <sup>6</sup>
		Country Code <sup>3</sup> -Number <sup>4</sup> -Kind Code <sup>5</sup> (if known)				
	B1	EP 0 421 735 A2	04-10-1991	Kabushiki Kaisha Toshiba		
	B2	EP 0 881 673 A2	12-02-1998	International Business Machines Corporation		
	B3	EP 1 037 263 A2	09/20/2000	Applied Materials, Inc.		
	B4	EP 1 085 557 A2	03-21-2001	Applied Materials, Inc.		
	B5	JP 4-131395	05-06-1992	Toshiba Corp, Ebara Corp		
	B6	JP 4-280993	10-06-1992	Electroplating Eng of Japan		
	B7	JP 54-148112	11-20-1979	Nakagawa KK		
	B8	JP 58-182823	10-25-1983	Nipon Denki KK		
	B9	JP 6-17291	01-25-1994	NEC Corp		
	B10	JP 63-118093	05-23-1988	Tanaka Electron Inc		
	B11	WO 93/17448	09-02-1993	AG Processing Technology, Inc.		
	B12	WO 97/12079	04-03-1997	Intel Corporation		
	B13	WO 99/40615	08/12/1999	Semitool, Inc.		

Examiner

Date Considered

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. <sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> See Kinds Codes of USPTO Patent Documents at [www.uspto.gov](http://www.uspto.gov) or MPEP 901.04. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. <sup>6</sup> Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450. If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2. 291504\_1



Substitute for form 1449B/PTO

# INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

Sheet 2

of 2

Application Number	10/823,849
Filing Date	APRIL 13, 2004
First Named Inventor	YEUK-FAI MOK, ET AL.
Group Art Unit	2812
Examiner Name	UNKNOWN
Attorney Docket Number	AMAT/8298/CMP/ECP/RKK
Submission Date	7/30/04

## NON PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	T <sup>2</sup>
	C1	COLOMBO, "Wafer Back Surface Film Removal", Central R&D, SGS-Thomson Microelectronics, Agrate, Italy, Spin Tech Technology, 6 pages.	
	C2	HOLM, Electric Contacts Theory and Application, Fourth Completely Rewritten Edition, Springer-Verlag, New York Inc., August 21, 1967, 27 pages.	
	C3	JIANG, et al., "Variations in Cu CMP Removal Rate Due to Cu Film Self-Annealing", Advanced Metallization Conference in 1998 (AMC 1998), 8 pages.	
	C4	PITNEY, "NEY Contact Manual", Electric Contacts for Low Energy Uses, 1973.	
	C5	SIMPSON, et al., "The Electrical Integrity of Copper Plated Wafers Using a Novel Plating Bath Chemistry" Slides Publicly Disclosed, 13 Pages October 17-22, 1999.	
	C6	SINGER, "Tantalum, Copper and Damascene: The Future of Interconnects," Semiconductor International, June 1998, Pages cover, pages 91-94, 96, & 98.	
	C7	SINGER, "Wafer Processing", Semiconductor International, June, 1998, page 70.	
	C8	Laurel Technologies Corporation from <a href="http://www.laurell.com">www.laurell.com</a> , "Two control configurations available- see WS 400 OR WS-400Lite." 1998, 6 pages.	
	C9	Welcome to Verteq Online Products Overview, from Verteq from <a href="http://www.verteq.com">www.verteq.com</a>	
	C10	"Metallization & Interconnect", Semitool, Inc., 1998, 4 pages	
	C11	European Search Report from EP 0 110 3525 dated July 10, 2001.	
	C12	European Search Report for Application 301415.6 dated December 11, 2000.	
	C13	Austrian Patent Office Search report for Application 00010504	

Examiner

Date Considered

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. 1 Applicant's unique citation designation number (optional). 2 Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450. If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2. 291504\_1